

To Boldly Go: A Partnership Enterprise to Produce Applied Health and Nursing Services Researchers in Canada

Aller de l'avant : un partenariat pour la formation de chercheurs en services de santé et de soins infirmiers au Canada

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Abstract

This paper describes the origins of the Regional Training Centres (RTCs) from the perspective of the Canadian Health Services Research Foundation (CHSRF), a national funder of applied health and nursing services research in Canada. The author details the contributions of CHSRF, Canadian Institutes of Health Research (CIHR) and Capacity for Applied and Developmental Research and Evaluation (CADRE) program, as well as an essential feature of the RTCs: their application of the linkage and exchange model (Lomas 2000). The discussion encompasses the RTC program requirements and selection process, as well as the fourth-year review, the aim of which was to assess the early results of the RTCs. The role that CHSRF plays in facilitating the national network of RTCs is highlighted. The author concludes with reflections on what has worked well, what might be done differently and advice to others interested in developing graduate education based on the linkage and exchange model.

Résumé

Cet article décrit les origines des Centres régionaux de formation (CRF) du point de vue de la Fondation canadienne de la recherche sur les services de santé (FCRSS), organisme de financement national dans le domaine de la recherche appliquée en services de santé et de soins infirmiers. L'auteur expose en détail la contribution de la FCRSS, des Instituts de recherche en santé du Canada (IRSC) et du programme Capacité et développement en recherche appliquée et évaluation dans les services de santé et en sciences infirmières (CADRE). Elle décrit également une caractéristique fondamentale des CRF : leur application du modèle de lien et d'échange (Lomas, 2000). L'article englobe les exigences du programme des CRF, le processus de sélection ainsi que l'examen de la quatrième année dont le but consistait à évaluer les premiers résultats des CRF. Le rôle que joue la FCRSS pour promouvoir le réseau national des CRF y est souligné. En conclusion, l'auteur soumet ses observations sur ce qui a bien fonctionné et sur ce qui pourrait être changé et fournit des conseils à ceux qui souhaiteraient élaborer un programme d'études supérieures fondées sur le modèle de lien et d'échange.

Key messages

- An unprecedented 10-year funding commitment by CHSRF and CIHR enabled the RTCs to focus on program implementation rather than contend with funding uncertainty.
- A compulsory residency with a decision-maker organization is a core requirement that differentiates the RTCs from many discipline-based graduate education programs that train applied health and nursing services researchers in Canada.
- Through the CADRE program, CHSRF and CIHR have launched a new genre of training programs using the linkage and exchange model popularized by CHSRF.
- The RTCs are becoming important hubs of training activities linking students, faculty, health system decision-makers and Executive Training for Research Application (EXTRA) fellows.

IN THE 1996 CANADIAN FEDERAL BUDGET, FUNDING WAS ANNOUNCED FOR THE establishment of a health services research fund. These monies were allocated in direct response to the recommendations of the National Forum on Health (1997). Encouraged by the United Kingdom's emphasis on a research and development strategy in the early 1990s, the Canadian government agreed to invest an endowment for the creation of a foundation to improve the scientific basis for decisions made by those managing health services. The Canadian Health Services Research

Foundation (CHSRF) was the realization of this vision. CHSRF was incorporated as a not-for-profit Canadian foundation with charitable status in the spring of 1997. CHSRF's mission is to support evidence-informed decision-making in the organization, management and delivery of health services through funding research, building capacity and knowledge transfer (CHSRF 2008a). CHSRF's strategic goals are:

1. to create high-quality new research that is useful for health service managers and policy makers (especially in the foundation's priority theme areas);
2. to increase the number and nature of applied health services and nursing researchers;
3. to get needed research into the hands of health system managers and policy makers in the right format, at the right time, through the right channels; and
4. to help health system managers, policy makers and their organizations to routinely acquire, appraise, adapt and apply relevant research in their work (CHSRF 2008a).

CHSRF's Board of Trustees identified health system managers and policy makers as the primary audience for the work of the foundation. CHSRF adopted an overall "linkage and exchange" model (Lomas 2000) to achieve its ends, offering programs and activities that encouraged far greater interaction between those doing research on the health system and those who might use it.

Three years after the creation of CHSRF, the federal government made another significant contribution to health services research. In June 2000, the Canadian Institutes of Health Research (CIHR) was established as the major federal agency responsible for funding health research in Canada. "It aims to excel in the creation of new health knowledge, and to translate that knowledge from the research setting into real world applications. The results are improved health for Canadians, more effective health services and products, and a strengthened Canadian health care system" (CIHR 2008).

CIHR consists of 13 "virtual" institutes, each headed by a Scientific Director and an Institute Advisory Board, which provides oversight (CIHR 2008). Given this focus, CIHR shares a similar, but much broader, mandate with CHSRF.

Together, CHSRF and CIHR have responded to the challenges associated with building capacity for applied health and nursing services research. In keeping with recommendations from the National Forum on Health (1997), CHSRF and CIHR committed a portion of their funding to address the shortage of applied health and nursing services researchers in Canada. As such, CHSRF and CIHR jointly designed the Capacity for Applied and Developmental Research and Evaluation (CADRE) program, which was a comprehensive response to develop more research capacity in Canada, as well as to shift the orientation of researchers towards the application and use of research.

The purpose of this paper is to provide a history of the CHSRF/CIHR Regional Training Centres (RTCs) from a funder's perspective. The discussion will highlight the need for and rationale underpinning the RTC initiative and describe the program requirements to which university consortia were invited to submit applications. The selection process, how the RTCs were reviewed at year four and the role of CHSRF in supporting their development are presented. Finally, reflections are offered on deliberate decisions taken by CHSRF and CIHR that have contributed to the accelerated implementation of the linkage and exchange model.

The CADRE Program

Announced by federal Minister of Health Allan Rock in November 1999, the CADRE program is a partnership between CHSRF and CIHR to develop increased capacity in applied health and nursing services research (CHSRF 2008b). A need was perceived not only for more research capacity in Canada, but also for an increase in the orientation of the existing and developing stock of health services and policy researchers towards the application of research.

The CADRE program consists of four comprehensive and interlocking initiatives designed to address short- and long-term capacity needs on a regional basis. Originally, these included 10-year awards for education and mentoring chairs, RTCs and annual awards for post-doctoral training and career reorientation. The mandate of the RTCs is to offer graduate-level training in applied health and nursing services research using a multi-university, interdisciplinary approach. The RTCs complement the CHSRF/CIHR Chair Awards, the commitment of which is to provide strong mentoring environments for trainees at various levels of graduate education. The Post-doctoral Awards offer qualified researchers the training and experience necessary to establish an independent research career. Finally, the Career Reorientation Awards are aimed at individuals interested in changing the direction of their careers towards applied health services research. This award was suspended following a CHSRF Board of Trustees decision in August 2007 because it was not successful in attracting applicants.

Each of the CADRE programs focuses on fostering planned interactions between researchers based in academic settings and decision-makers (defined as health system managers and policy makers). Lomas (2000) popularized this approach, commonly known as "linkage and exchange." The impact of the CADRE program was expected to extend beyond the direct program participants and into applied healthcare provider organizations responsible for healthcare policy, management and delivery.

The CADRE budget represents an annual investment of approximately \$6.5 million. The core funding for the CADRE program consists of equal contributions from CHSRF and CIHR. CHSRF's portion is further divided into allocations from core funds and the Nursing Research Fund (NRF), which was created using a \$25 million

endowment from the federal government specifically targeted towards nursing. The NRF has spent the equivalent of \$2.5 million per year for 10 years (1998–2008) for nursing research capacity development and research on nursing issues, a portion of which goes to support the four components of the CADRE program.

The CADRE program has been formalized in a memorandum of understanding between CHSRF and CIHR. CHSRF is the designated administrative lead. This role involves program management and fulfilling accountability requirements. In addition, CHSRF has led such initiatives as the fourth-year evaluation of the CADRE program, in particular, an assessment of the Post-doctoral Award, development of a newsletter, oversight of the annual post-doctoral competition and organization of twice-yearly network development and educational meetings for the RTCs and the chairs.

Rationale for the Linkage and Exchange Approach

The National Forum on Health (1997) promoted the use of evidence to improve health system outcomes. The emergence of evidence-informed management points to a need for trained health and nursing services researchers who are competent in transferring research, with the aim of increasing its use by healthcare leaders to make policy and management decisions.

Training for applied health services researchers has been available in various locations across Canada. Graduate training, however, is most often discipline-based and traditionally embedded in community health and clinical epidemiology programs, and to a lesser extent, in public health and health sciences faculties (Smith and Edwards 2003). More importantly, graduate-level training has been largely devoid of interaction with users of research in applied settings (Boyer 1990; Lomas 2000).

Support to develop a “linkage and exchange” approach within training programs emerged from a need to respond to the shift from evidence-based medicine to evidence-informed management (Denis et al. 2008). The philosophy underpinning the CADRE program, and in particular the RTC requirements, emerged from a notion that decision-makers should be involved in the training of researchers as producers of new knowledge (Lomas 2000).

The traditional approach to graduate training in applied health services research has predominantly emphasized development of academic skills, including the preparation of peer-reviewed publications and grant proposals (Smith and Edwards 2003). Although these skills are essential to the repertoire of health services researchers, Lomas (2000) and others have pointed out various shortcomings in such training. First, the lack of exposure to applied environments isolates students from understanding how research can be applied (Lomas 2000; Boyer 1990). While established graduate education provides a solid foundation in research methods, grant writing skills

and traditional approaches to academic dissemination (Smith and Edwards 2003), it has been limited in its efforts at engaging students with the end-users of research. CHSRF and CIHR were convinced that the “linkage and exchange” approach showed promise and was worth investing in to address these deficiencies.

The environment in which the RTCs currently operate is different from the one in which they were created. There has been, in recent years, a proliferation of funding for graduate training in applied health and nursing services research. For example, in 2001 CIHR launched the Strategic Training Initiatives in Health Research. This training grant program has similar objectives and expected outcomes to those that had been established for the CHSRF/CIHR RTCs, although the funding commitment was for a shorter time frame (i.e., six years).

Regional Training Centres: Program Requirements

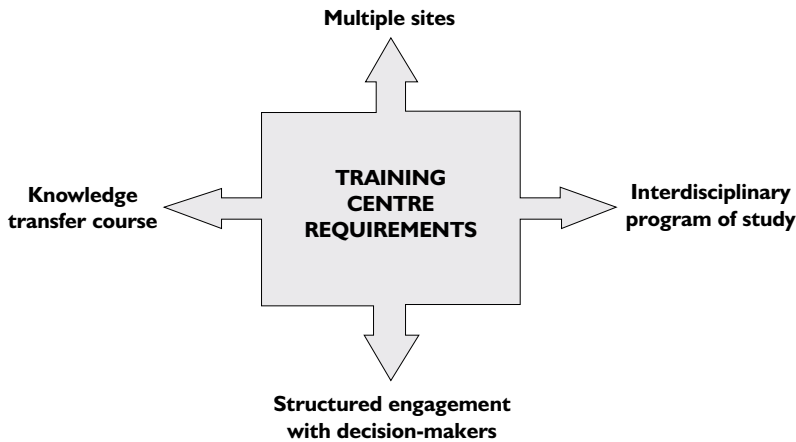
The Regional Training Centre award competition was launched in 2000 and was addressed to post-secondary academic institutions interested in creating consortia to develop and administer graduate-level programs to train applied health services and nursing researchers. Cross-institutional composition of the RTCs was a deliberate decision. This approach was viewed by the funders as an incentive to promote innovation in curriculum content, program design and delivery.

CHSRF anticipated proposals that would draw from and expand upon existing graduate programs in order to accelerate the production of this needed capacity, both regionally and nationally. The RTCs were also expected to complement the 10-year commitment to education and mentoring programs established through the chairs program and provide additional regional training capacity. The objectives of the RTCs were:

- to build consortia among post-secondary academic institutions, departments, faculties and decision-makers to augment current training; and
- to offer applied research training that is interdisciplinary and takes into account the concerns of health system managers and policy makers (CHSRF 2001).

In order to respect the diversity of university infrastructure and academic programs, the RTCs were given broad guidelines to develop training programs. The stipulated involvement of at least two academic institutions per training centre was intended to offset discrepancies between the traditional academic hubs with flourishing graduate programs and regions that had less developed resources in applied health services and nursing research training. Program requirements common to all training programs included (1) multiple sites, (2) a curriculum that includes training in knowledge transfer, (3) mandatory student residency with decision-makers and (4) an interdisciplinary approach (Figure 1).

FIGURE 1. RTC program requirements



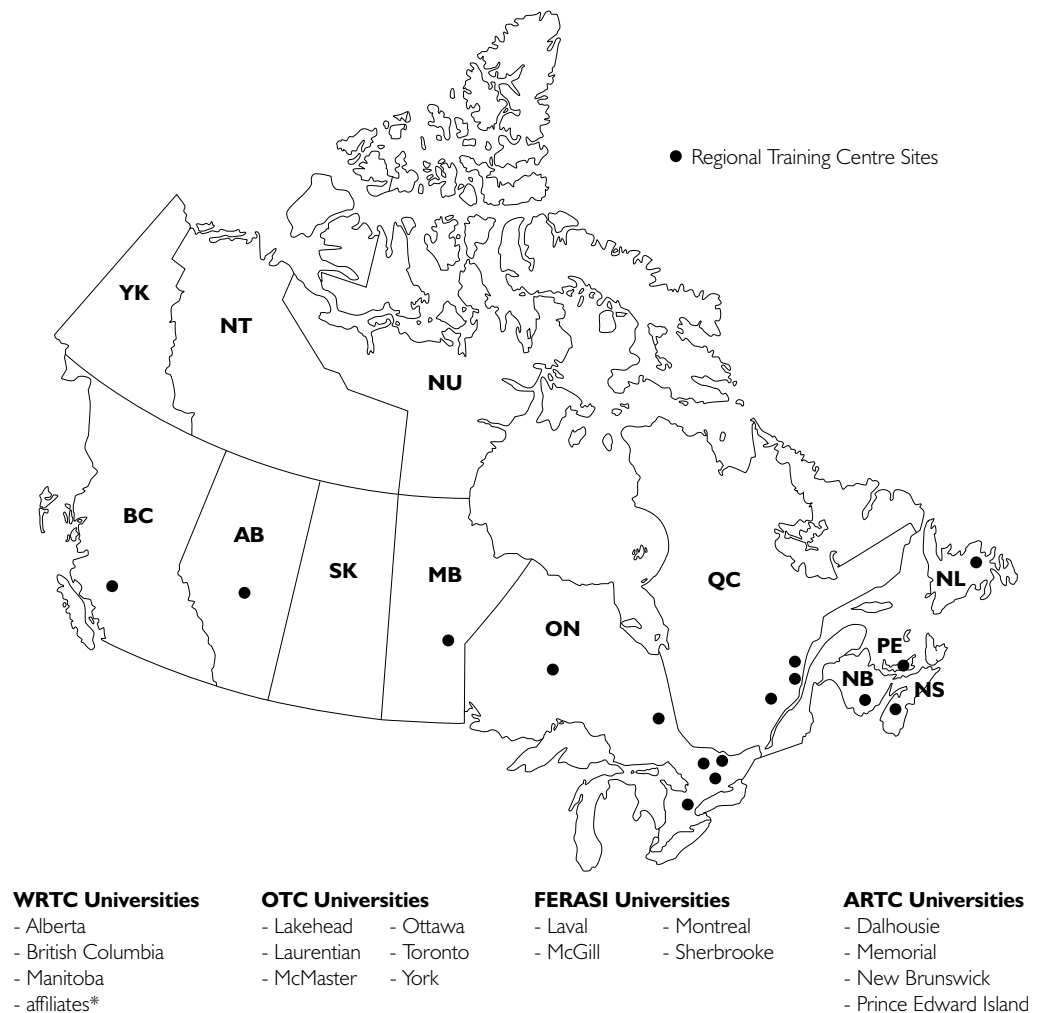
The RTCs were designed to maximize opportunities in response to identified regional needs and gaps. The funding to develop the RTCs was viewed by CHSRF as one strategy to stimulate innovative, inter-institutional and collaborative graduate education in applied health and nursing services research. If the training was to be regionally appropriate and relevant, each centre had to take into account institutional strengths of participating universities when preparing their letters of intent and full-scale applications. Each consortium was required to demonstrate how the participating academic programs, faculties, departments and institutions were contributing their expertise to the RTC. Dallaire et al. (2008) explain how the RTCs have embraced interdisciplinarity to encompass diverse disciplines and methodological approaches to finding solutions for increasingly complex healthcare issues and challenges.

In tandem with the program requirements, there was a deliberate emphasis by CHSRF and CIHR on increasing capacity in regions across Canada that had less well-developed resources in health services and nursing research training. The RTCs responded by proposing innovative strategies to extend the reach of their training through distance and Web-based educational platforms interspersed with face-to-face courses and workshops. CHSRF promoted the development of recruitment strategies to increase access for students from disciplines and faculties that are traditionally under-represented in health services and nursing research.

The RTCs were asked to demonstrate how students would learn about communicating research in ways to enhance its use by decision-makers. D'Amour et al. (2008) describe strategies that the RTCs designed to achieve knowledge transfer and exchange. Students were required to complete a compulsory placement with health system decision-makers. This residency, or "real-life experience," was expected to play a dual role in (1) exposing students to the ways in which evidence created through

research is used to support effective management of healthcare and (2) actively engaging decision-makers and their organizations in graduate training. These requirements have differentiated the RTCs from existing graduate education programs. See Brachman et al. (2008) for a detailed description outlining how these regional training programs were launched and are currently operating. Morrison et al. (2008) describe how the RTCs give students exclusive access to regional health services and policy networks and underline graduates' belief that this training experience has facilitated new methodological approaches and innovative research ideas.

FIGURE 2. Network of RTCs: site distribution



WRTC: Western Regional Training Centre **OTC:** Ontario Training Centre **FERASI:** Centre FERASI **ARTC:** Atlantic Regional Training Centre

Selection of the Regional Training Centres

The application for the RTC award comprised two stages: a letter of intent followed by a full application. A review of applications was undertaken during each phase of the competition by an international Merit Review Panel consisting of academics and decision-makers.

Five university consortia were awarded funding; the Atlantic Regional Training Centre in Applied Health Services Research (ARTC), the Centre FERASI (Formation et expertise en recherche en administration des services infirmiers), and the Western Regional Training Centre for Health Services Research (WRTC) in 2001, and the Ontario Training Centre in Health Services and Policy Research (OTC) in 2002. One national centre – the Centre for Knowledge Transfer – was also established. This centre existed from July 2001 until June 2006. Following a review of the RTCs in the fourth year of operation, and upon recommendation of the Merit Review Panel, the funders decided not to extend funding for this national centre.

A list of the university consortia including current and former principal investigators, along with centre and site directors for the currently funded RTCs, is presented in Appendix 1. The map in Figure 2 illustrates the pan-Canadian distribution of RTCs and shows the multi-site composition for each centre currently funded by CHSRF and CIHR.

The RTCs have been able to secure additional sources of funding, including provincial co-sponsors. These include the Alberta Heritage Foundation for Medical Research, the Ontario Ministry of Health and Long-Term Care, the Fonds de la recherche en santé du Québec and the Nova Scotia Health Research Foundation. In addition, the Centre FERASI and the OTC receive funding from the Nursing Research Fund. All RTCs have received local support for one-time initiatives such as annual workshops and institutes or course conversion to Web-based delivery. Finally, many healthcare organizations provide substantial student support on an annual basis by paying for the student residencies arranged by the RTCs as part of the program requirements.

Fourth-Year Review

CHSRF was accountable to its Board of Trustees and CIHR to carry out a rigorous review of the RTCs in relation to their mid-point performance against their stated program objectives and achievements. The intent was to strengthen each RTC and provide it with substantial feedback such that it could develop a sustainability plan to secure funding to extend the RTCs beyond the initial 10-year commitment by CHSRF and CIHR. Davey and Altman (2008) offer a detailed report on this review.

The fourth-year review process was based on a Program Logic Model that identified relevant evaluation issues, questions and potential indicators. Figure

3 depicts the logic model based on the Canadian government's Results-based Accountability Framework designed by the Treasury Board. The review had four major objectives:

- document each RTC's progress against the objectives and implementation plan set out at the time of application (or revised objectives as approved by CHSRF);
- determine whether a given RTC is sufficiently established and poised to make a valuable capacity-building contribution over the next six years and beyond;
- render a recommendation regarding continuation of funding for the remainder of the grant period;
- provide feedback to each RTC on ways to optimize performance over the next six years (CHSRF 2004).

Each Merit Review Panel included Drs. Ken Davey and Jack Altman as co-chairs in addition to a third panellist selected from a list of potential reviewers submitted by each RTC. The panel was supported during the site visit by the CADRE staff and an occasional observer from the CIHR. Panel members completed a thorough orientation and prepared for each review well in advance of the actual site visit. Six to eight weeks before the visit, panel members received the following documentation:

- a copy of the original award application, as well as the international peer review comments and recommendations;
- a customized review report prepared by the RTC that included short-term outputs and outcomes, a strategic plan and an accountability framework;
- results of anonymous online surveys developed and administered by CHSRF staff and sent to students, participating faculty, principals and decision-makers;
- financial reports setting out expenditures to date and a budget to support the strategic plan over the remaining six years;
- a database containing details about the students involved in the program;
- annual reports submitted to the CHSRF, including CHSRF's feedback; and
- a proposed site visit agenda (CHSRF 2004).

The preparation of the customized review report involved a period of intense self-study during which each RTC focused on assessing crucial program elements, such as curriculum/program of study, institutional support, governance, strategic planning and accountability. This report formed the documentary basis for the review, together with annual progress reports and the initial application.

The site visit began with a brief presentation by the RTC director, followed by a question-and-answer session. The rest of the day featured interviews with students, decision-maker partners, members of the Advisory Board and senior administrators

of the university. Lastly, the panel convened briefly to discuss its preliminary findings, and then met in camera (in the absence of CHSRF staff) with the RTC's director.

The morning following the site visit was spent preparing a draft of the review results. The recommendation page provided one of three options: renewal without condition, renewal subject to specified conditions or cancellation of funding. Following receipt of the Merit Review Panel's report, CHSRF convened a teleconference with the funders to discuss the findings and recommendations.

Four of the five training centres were renewed through this process, with the one national centre being recommended for non-renewal. A key question arising from the review of the Centre for Knowledge Transfer was whether the RTC model, used to develop regional capacity, was an appropriate choice for a centre with a mandate to provide national-level training.

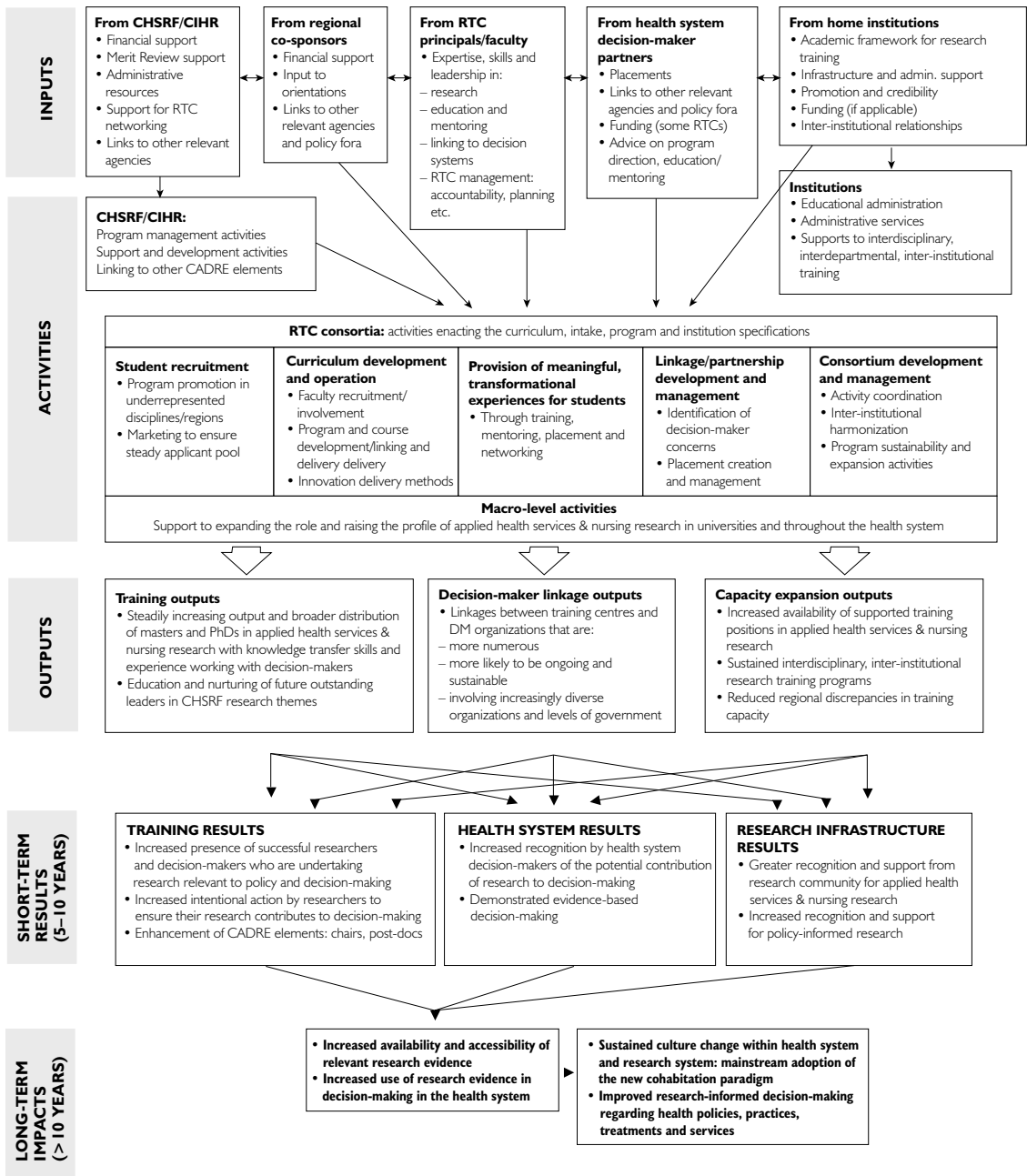
Cross-Program Synergies

It is evident that the funding provided by CHSRF and CIHR has been a significant incentive for numerous post-secondary academic institutions across Canada to cooperate in developing multi-site consortia to implement and administer the RTCs. Significant contributions have been made in facilitating complementary arrangements among universities that did not have an established track record in cooperative educational program design and delivery. DiCenso et al. (2008) present an insightful discussion highlighting the benefits and challenges of forming these inter-institutional consortia.

In addition to building research capacity through graduate education, each RTC also functions as a Regional Mentoring Centre (RMC) funded through the Executive Training for Research Application (EXTRA) program. As one of CHSRF's flagship programs, EXTRA focuses on building individual and organizational capacity. It received 10 years of Canadian government funding to optimize the use of research evidence in managing Canadian healthcare delivery. EXTRA develops regional capacity by giving health system managers across Canada the skills to better incorporate research evidence into their daily work through a two-year national training program. In their role as RMCs, the centres function as a conduit into regional academic mentoring resources to support the completion of the EXTRA fellows' intervention projects.

Most of the RTCs have also been involved with the organization of CHSRF Research Use Weeks. This initiative was designed to improve regional receptor capacity for research use by engaging health system managers and policy makers in short-term training. The involvement of the RTCs in both Research Use Weeks and EXTRA has enhanced their profile as regional "go-to places" for resources that support evidence-informed decision-making. The creation of the RMCs has also enabled

FIGURE 3. Program Logic Model of the Regional Training Centres Program



RTC students to interact frequently with EXTRA fellows, who represent decision-makers at the executive level. As these mutually beneficial relationships continue to unfold, regional healthcare organizations are hiring RTC graduates, while the RTCs continue to rely on these organizations to assist students in gaining applied experience in knowledge transfer and exchange. Montelpare et al. (2008) explore how the RTCs intend to capitalize on these dual functions and synergistic pursuits while building on the suggestions generated by the fourth-year reviews to shape the future of the RTCs beyond CADRE.

Reflections from the Funder's Perspective on the Journey to Here

As the papers in this special supplement demonstrate, the RTCs have travelled a considerable distance since the original CHSRF/CIHR call for applications. Reflections from a funder's perspective on key aspects of this journey follow: what has worked well and why; where, in hindsight, we might have done things differently; and our advice to others.

What has worked

STABLE SOURCE OF RTC FUNDING

The 10-year funding commitment for the RTCs (assuming a favourable result from the mid-term review) gave these multi-university consortia the freedom to focus on program development and to create longer-term partnerships with regional and provincial funding co-sponsors and health system decision-makers.

REGULAR EXCHANGES AMONG THE CADRE NETWORK

The CADRE program organizes semi-annual educational meetings in various locations. These initiatives have facilitated a national network fostering collegiality, trust and collaboration in which the RTCs have been able to develop a common perspective, share program resources and work together to resolve problems of mutual concern. Of further benefit is the exchange between funders and the RTCs and between the funders themselves. The RTCs' involvement in additional linkage and exchange activities led by CHSRF has helped the centres to become more quickly acculturated to this model of collaborative research production using knowledge transfer and exchange strategies and techniques.

PARTNERSHIP BETWEEN FUNDERS

The memorandum of understanding between CHSRF and CIHR set out important processes for the CADRE program, such as the four-, eight- and 10-year reviews and annual reporting requirements for fundees. Assigning administrative leadership to CHSRF provided clarity of communication and a single contact point.

INTERNATIONAL MERIT REVIEW TO SELECT THE RTCs

The RTCs were selected by a Merit Review Panel made up of decision-makers and health researchers. This feature of the RTC selection process, coupled with the international dimension, provided additional profile and prestige to the award holders.

CORE REQUIREMENTS FOR THE RTCs

The success and leverage enjoyed by the RTCs, despite their differences and varied approaches, is in part due to the identification of the “right” core program requirements:

- *Multiple sites:* Options for graduate education were created that otherwise would not have been available. Smaller academic institutions were able to tap into regional expertise within larger academic institutions to increase access to graduate training in applied health services and nursing research.
- *Interdisciplinarity:* The RTCs created a “home” for interdisciplinary health research studies that would have been problematic in a discipline-based academic environment.
- *Mandatory student–decision-maker placements:* Relationships were established between academic institutions and health system managers that otherwise would not have developed.
- *Knowledge transfer and exchange:* Generated an array of tools, curricula and expertise across Canada.

MONITORING PERFORMANCE

The annual reporting requirements for the RTCs involve submitting to CHSRF (1) an updated participant database, (2) financial statements and expenditure forecasts and (3) a program report that describes progress and annual achievements. This documentation provided baseline information to the fourth-year reviewers about the evolution of each RTC.

What we would do differently

PARTICIPANT DATABASE AND GUIDELINES

A participant database for tracking student involvement and outcomes was developed soon after the CADRE program was launched. The RTCs were required, in compliance with their award, to submit information about their students annually. Owing to a lack of consistent definitions and data collection methods, difficulties in tracking student achievements were identified during the fourth-year reviews. This central database has since been modified and is actively managed by CHSRF to ensure accurate reporting of student outcomes.

INTEGRATING STRATEGIC AND OPERATIONAL PERSPECTIVES

During the early educational and networking meetings organized by the CADRE

program, the program managers (who are focused on day-to-day operational issues for the RTCs, compared with the centre directors, who are the designated academic leaders for each centre) were not included as full participants. The fourth-year review acknowledged the invaluable role the program managers play in bridging the gaps that naturally exist among the various academic sites involved with each RTC.

NATURE OF TRAINING ENVIRONMENT PRIOR TO THIS JOURNEY

No environmental scan of existing applied health and nursing services graduate programs was undertaken prior to developing the RTCs. Such baseline information could have been invaluable in documenting retrospectively how various training gaps have been closed through the launch of the RTCs' graduate education opportunities.

EARLY FOCUS ON SUSTAINABILITY

Thinking about a program's sustainability before it becomes fully operational seems counterintuitive. To some extent, the stability of the CHSRF/CIHR funding placed the RTCs in a comfortable financial position. The issue of sustainability did not surface until after the fourth-year reviews were completed. Although RTCs were asked, as part of the review process, to provide strategic plans, most had not considered how the future might unfold after the CADRE funding ceased. An earlier focus on sustainability planning might have prompted the RTCs to consider possible program niches and options for further exploration.

Advice to others

From the funder's perspective, the RTC enterprise has been highly successful to date, and we are confident that the major benefits to academic institutions and healthcare systems are yet to be fully realized. What advice would we offer to others who are considering the development of a similar training enterprise? CHSRF would suggest the following:

- ✦ The funder's role as a granting agency *and* as a partner in the enterprise must be balanced such that both parties are open to learning and adapting along the way.
- ✦ There is a need for both consistency of data requirements and comparable features across programs *and* for flexibility and creativity in program development and design.
- ✦ Both funder and fundee must respect formal accountability *as well as* the licence to innovate, perhaps beyond the original terms of engagement. Although flexibility and innovation can present as both strengths and weaknesses of any program, tolerance and leadership must be present in the right balance on both sides of the partnership.
- ✦ Very strong local links should be established between decision-maker partners and affiliated academic institutions *in addition to* links at the national level

across programs.

- The training program should be situated within a strong research milieu where high value is placed on knowledge transfer and research use.
- The funding tenure should be of sufficient duration to provide stable infrastructure as RTCs actively pursue meaningful partnerships.
- Trust and collaborative horizontal and vertical relationships should be enhanced through face-to-face network development and site visits.
- The performance monitoring and accountability requirements should be clearly specified and promoted to provoke strategic thinking.

Investing in capacity building requires strong and wise leadership and skills that bridge the academy and the health system. We sincerely hope that the experience of CHSRF and CIHR as funders, and the RTCs as fundees, is of value to others. We look forward to the “next generation” of initiatives launched by the RTC enterprise as new partners are engaged as funders to continue this journey.

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APPENDIX 1. Current and former principal investigators, site directors and centre directors for each Regional Training Centre.

Western Regional Training Centre	Ontario Training Centre	Centre FERASI	Atlantic Regional Training Centre
<p>University of Alberta</p> <ul style="list-style-type: none"> •Nicola Cherry* •Karen Kelly* (Site Director) •Beth Horsburgh* † •Devidas Menon* <p>University of British Columbia</p> <ul style="list-style-type: none"> •Morris Barer* •Adrian Levy* •Kim McGrail* •Isabelle Savoie* † •Robert Reid* † •Martin T. Schechter* •Samuel B. Sheps* (Centre Director) <p>University of Manitoba</p> <ul style="list-style-type: none"> •Malcolm Doupe (Site Director, 2007-Present) •Thomas Hassard (Site Director, 2001-2003) •Anita Kozyrskyj (Site Director, 2003-2006) •Patricia J. Martens* •John D. O'Neil* † •Leslie L. Roos (Site Director, 2006-2007) •Noralou P. Roos* † •T. Kue Young* 	<p>Lakehead University</p> <ul style="list-style-type: none"> •Bruce Minore* (Site Director) •William Montelpare* •Pam Wakewich <p>Laurentian University</p> <ul style="list-style-type: none"> •Phyllis Montgomery (Site Director) •Ellen Rukholm* † •Raymond Pong* <p>McMaster University</p> <ul style="list-style-type: none"> •Kevin Brazil (Site Director) •Alba DiCenso* (Centre Director) •Brian Hutchison* [Retired] •Wendy Sword •Susan Watt •Christel Woodward* [Retired] <p>University of Ottawa</p> <ul style="list-style-type: none"> •Doug Angus* •Barb Davies* •Douglas Angus* (Site Director) •Graham Nichol † •Robert Spasoff* [Retired] •Brenda Wilson <p>University of Toronto</p> <ul style="list-style-type: none"> •Rhonda Cockerill* (Site Director) •Peter Coyte* •Diane Doran* •Paula Goering* •Linda O'Brien-Pallas* <p>York University</p> <ul style="list-style-type: none"> •Pat Armstrong* (Site Director) •Marcia Rioux* 	<p>Université Laval</p> <ul style="list-style-type: none"> •Clémence Dallaire* (Site Director) •Linda Lepage* •Diane Morin <p>Université McGill</p> <ul style="list-style-type: none"> •Helene Ezer •Susan French* •Mélanie Lavoie-Tremblay (Site Director) <p>Université de Montréal</p> <ul style="list-style-type: none"> •Danielle D'Amour* (Centre Director) •Jean-Louis Denis* •Christine Colin* •Carl-Ardy Dubois •André Duquette* •Francine Girard <p>Université de Sherbrooke</p> <ul style="list-style-type: none"> •Luc Mathieu (Site Director) 	<p>Dalhousie University</p> <ul style="list-style-type: none"> •Tom Rathwell* <p>Memorial University of Newfoundland</p> <ul style="list-style-type: none"> •Roy West* [Retired] •Doreen Neville † •Anne Kearney <p>University of New Brunswick</p> <ul style="list-style-type: none"> •Ed Biden (Centre Director) •John Rowcroft* [Retired] <p>University of Prince Edward Island</p> <ul style="list-style-type: none"> •Kim Critchley •Debbie MacLellan •Vianne Timmons

* Founding Principal Investigator

† Former Principal Investigator